Carex baileyi

Status

Federal status: G4 N4, Not listed

NH state status: S1S2, Threatened; proposed for endangered status (5/03)

ME state status: SH, Special Concern

Very little is known about population trends for this species. The fact that most occurrences in NH and ME are historic may indicate a viability concern for the species, though it is unknown if those occurrences have been revisited and are truly extirpated or are still extant but not documented as such. It is ranked as historic or vulnerable in many states, and as apparently secure in several others.

The upland forest expert panel did not discuss this species in detail due to time and limited knowledge. Other local experts provided input through phone conversations, but they were not asked to provide viability outcomes. The limited information that is available indicates the most appropriate viability outcomes are probably B or C.

Distribution

Carex baileyi is an Appalachian species. It occurs from Maine to North Carolina, Kentucky, and Tennessee, and is at the northeastern limit of its range in northern New England.

In New Hampshire, *Carex baileyi* is extant in Walpole and Monroe and historic in Alton, Dummer, Franconia, and Marlow. None of these occurrences are on the WMNF. In Maine, it was historically found in Norridgewock, Batchelder's Grant, Denmark, and Bridgton. The Batchelder's Grant occurrence was on the WMNF, and was last seen in 1973.

Habitat

Carex baileyi occurs in wet meadows, fens, wet swamp woods, swales, mixed woods, and along roadsides and ditches. It is often found in sites that are somewhat open from disturbance, such as along roads and in forest openings, though it also will occur in interior woods and meadow habitats. NHNHI indicates it prefers nutrient rich sites, while Flora of North America documents it as usually occurring in acidic soils. Local experts consulted indicated no known preference for any pH, and the USDA Plants database indicates that it uses soils with pH ranging from 4.8 to 7.

Limiting Factors

It is unknown what limits this species. It is similar in appearance to a very common species (*Carex lurida*), so may be underreported.

Viability concern

Only one occurrence is known on the WMNF, and that has not been verified since 1973. Little is known about its habitat requirements and potential threats. Listed as RFSS for WMNF due to rarity on Forest and possibility that timber harvest or other management could impact it.

Management activities that might affect populations or viability

Unknown. It occurs on wet soils, which are often avoided by the Forest during timber harvest and road and trail construction. Harvest that does occur on wet soils is usually in the winter when the potential for impacts is less. It is unknown if harvest could reduce habitat suitability or directly impact plants. Road and trail construction would result in canopy openings, in which this species is often found, but also could directly impact plants or alter soil moisture regime.

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